REMARKS

This amendment is submitted in response to an Office Action mailed August 25, 2005. Applicant respectfully requests reconsideration of the subject application as amended herein.

Claims 1-33 remain in the present application.

In the August 25, 2005 Office Action, claims 1-5, 12-14, 24, and 25 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,327,663 issued to Isaac et al. (hereinafter "Isaac") in view of U.S. Patent No. 6,534,960 issued to Wells et al. (hereinafter "Wells"). Applicant has amended the claims to clearly distinguish over Isaac in view of Wells. For example, amended claim 1 includes:

> An apparatus comprising:
>
> a voltage regulator having an output path to supply a voltage to power an electrical component, a power consumption rate of the electrical component to fluctuate during operation;
>
> a first sense point to sense a first feedback signal at a first sense location on the output path; and
>
> a second sense point to sense a second feedback signal at a second sense location on the output path, said first and second feedback signals to at least partially represent fluctuations in the power consumption rate, and said voltage regulator to adjust the voltage based at least in part on a combination of the first and second feedback signals.

In amended claim 1, a voltage regulator combines feedback signals from two different sense locations on an output path leading to an electrical component. The power consumption rate of the component can fluctuate during operation. So, the voltage regulator can adjust the voltage supplied to the component based on the combination of the two feedback signals.

For example, in one embodiment, the voltage regulator and the electrical component may be attached to a motherboard, and the output path may lead from the voltage regulator to the component through the motherboard. In this embodiment, one of the feedback signals may represent steady-state fluctuations in power consumption sensed at a location in the output path on the motherboard, and the other feedback signal may represent transient fluctuations in power consumption sensed at a location in the output path at the component itself.

Isaac, in contrast, is directed to an entirely different issue than amended claim 1. In Isaac, a voltage supply can power more than one type of processor. For example, one type of processor may require a 5V power supply, and another type of processor may require a 3V power supply. Using the wrong voltage could damage a processor. So, Isaac can automatically identify which voltage to apply to a particular processor before actually delivering the voltage (Isaac; col. 1, lines 8-12, 31-33, 51-52, 61-65; and col. 2, lines 48-52).

Isaac has nothing whatsoever to do with regulating the voltage supplied to an electrical component during operation to compensate for fluctuations in power consumed by the component. Therefore, applicant respectfully submits that Isaac does not suggest, disclose, or enable a "voltage regulator to adjust the voltage based at least in part on a combination of the first and second feedback signals" from two different sense locations on an output path, as claimed in amended claim 1.

Wells describes a multi-channel interleaved power converter (Wells; col. 1, lines 47-49). Each channel of the power converter can perform essentially the same function so the channels can be used one at a time to distribute the load, or share the work (Wells; col. 1, lines 18-20). Wells is directed to how the load is shared among the channels (Wells; col. 1, lines 47-49).

The power converter includes two feedback loops, an outer loop and an inner loop (Wells; col. 2, lines 40-53). The outer loop controls the converter's output voltage to correspond to a reference voltage (Wells; col. 2, lines 43-45, 53-63; col. 3, lines 10-14). The inner loop controls how the load is balanced among the channels (Well; col. 2, lines 45-53; col. 2, line 63 to col. 3, line 11).

In other words, the feedback signals in the inner and outer loops are used separately, and for different purposes. The outer loop uses only one feedback signal, V_{OUT}. The inner feedback loop uses multiple feedback signals, i_{L1} and i_{L2}, but these signals have nothing to do with regulating the output voltage, and are used instead the balance the duration each channel in the power converter is active.

Therefore, like Isaac, Applicant respectfully submits that Wells does not suggest, disclose, or enable a "voltage regulator to adjust the voltage based at least in part on a combination of the first and second feedback signals" from two different sense locations on an output path, as claimed in amended claim 1.

Thus, for at least the reasons discussed above, Applicant respectfully submits that amended claim 1 is patentable over Isaac in view of Wells.

Applicant submits that the reasoning presented above with respect to amended claim 1 similarly applies to claims 2-5, 12-14, 24, and 25, as amended. Thus, for at least the reasons discussed above, Applicant respectfully submits that claims 2-5, 12-14, 24, and 25 are likewise patentable over Isaac in view of Wells.

In the May 6, 2005 Office Action, claims 6-11, 15-23, and 26-33 were rejected under 35 U.S.C. § 103 as being unpatentable over Isaac in view of Wells, further in view of U.S. Patent No. 6,262,566 issued to Dinh (hereinafter "Dinh "). Applicant respectfully submits that the reasoning presented above with respect to Isaac and Wells similarly applies to claims 6-11, 15-23, and 26-33. Dinh was cited for teaching "transient type filters for the feedback signal."

Assuming purely for the sake of argument that the Office Action is correct with respect to the teachings of Dinh, Applicant respectfully submits that Dinh fails to cure the deficiencies of Isaac and Wells as discussed above. Therefore, Applicant respectfully submits that claims 6-11, 15-23, and 26-33, as amended, are patentable over Isaac in view of Wells, further in view of Dinh.

In conclusion, Applicant respectfully submits that claims 1-33 are now in a condition for allowance, and Applicant respectfully requests allowance of such claims.

Please charge any shortages and credit any overages to our Deposit Account No. 50-0221.

Respectfully submitted,

INTEL CORPORATION

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